SEQUENCE LISTING

<110> Zhou, Qun-Yong
Ehlert, Frederick

<120> Prokineticin Polypeptides, Related
Compositions and Methods

<130> P-UC 5016

<140> US 10/016,481
<141> 2001-11-01

<150> 60/245,882
<151> 2000-11-03

<160> 22

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 1377
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (55)...(369)

<400> 1

```
ggggaagcga gaggcatcta agcaggcagt gttttgcctt caccccaagt gacc atg   57
                                                           Met
                                                            1

aga ggt gcc acg cga gtc tca atc atg ctc ctc cta gta act gtg tct   105
Arg Gly Ala Thr Arg Val Ser Ile Met Leu Leu Leu Val Thr Val Ser
             5                  10                  15

gac tgt gct gtg atc aca ggg gcc tgt gag cgg gat gtc cag tgt ggg   153
Asp Cys Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys Gly
         20                  25                  30

gca ggc acc tgc tgt gcc atc agc ctg tgg ctt cga ggg ctg cgg atg   201
Ala Gly Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg Met
     35                  40                  45

tgc acc ccg ctg ggg cgg gaa ggc gag gag tgc cac ccc ggc agc cac   249
Cys Thr Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser His
 50                  55                  60                  65

aag gtc ccc ttc ttc agg aaa cgc aag cac cac acc tgt cct tgc ttg   297
Lys Val Pro Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys Leu
```

```
                70                  75                  80

ccc aac ctg ctg tgc tcc agg ttc ccg gac ggc agg tac cgc tgc tcc   345
Pro Asn Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys Ser
             85                  90                  95

atg gac ttg aag aac atc aat ttt taggcgcttg cctggtctca ggatacccac  399
Met Asp Leu Lys Asn Ile Asn Phe
        100                 105

catccttttc tgagcacagc ctggattttt atttctgcca tgaaacccag ctcccatgac 459
tctcccagtc cctacactga ctaccctgat ctctcttgtc tagtacgcac atatgcacac 519
aggcagacat acctcccatc atgacatggt ccccaggctg gcctgaggat gtcacagctt 579
gaggctgtgg tgtgaaaggt ggccagcctg gttctcttcc ctgctcaggc tgccagagag 639
gtggtaaatg gcagaaagga cattcccccc cccctcccca ggtgacctgc tctctttcct 699
gggccctgcc cctctcccca catgtatccc tcggtctgaa ttagacattc ctgggcacag 759
gctcttgggt gcattgctca gagtcccagg tcctggcctg accctcaggc ccttcacgtg 819
aggtctgtga ggaccaattt gtgggtagtt catcttccct cgattggtta actccttagt 879
ttcagaccac agactcaaga ttggctcttc ccagagggca gcagacagtc accccaaggc 939
aggtgtaggg agcccaggga ggccaatcag ccccctgaag actctggtcc cagtcagcct 999
gtggcttgtg gcctgtgacc tgtgaccttc tgccagaatt gtcatgcctc tgaggccccc 1059
tcttaccaca ctttaccagt taaccactga agcccccaat tcccacagct tttccattaa 1119
aatgcaaatg gtggtggttc aatctaatct gatattgaca tattagaagg caattagggt 1179
gtttccttaa acaactcctt tccaaggatc agccctgaga gcaggttggt gactttgagg 1239
agggcagtcc tctgtccaga ttggggtggg agcaagggac agggagcagg gcaggggctg 1299
aaaggggcac tgattcagac cagggaggca actacacacc aacctgctgg ctttagaata 1359
aaagcaccaa ctgaactg                                               1377
```

<210> 2
<211> 105
<212> PRT
<213> Homo sapiens

<400> 2

```
Met Arg Gly Ala Thr Arg Val Ser Ile Met Leu Leu Leu Val Thr Val
 1               5                  10                  15
Ser Asp Cys Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys
            20                  25                  30
Gly Ala Gly Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg
        35                  40                  45
Met Cys Thr Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser
    50                  55                  60
His Lys Val Pro Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys
65                  70                  75                  80
Leu Pro Asn Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys
                85                  90                  95
Ser Met Asp Leu Lys Asn Ile Asn Phe
            100                 105
```

<210> 3
<211> 86
<212> PRT

<213> Homo sapiens

<400> 3

```
Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys Gly Ala Gly
 1               5                  10                  15
Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg Met Cys Thr
            20                  25                  30
Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser His Lys Val
        35                  40                  45
Pro Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys Leu Pro Asn
    50                  55                  60
Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys Ser Met Asp
65                  70                  75                  80
Leu Lys Asn Ile Asn Phe
                85
```

<210> 4
<211> 1406
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (10)...(333)

<400> 4

```
gagggcgcc atg agg agc ctg tgc tgc gcc cca ctc ctg ctc ctc ttg ctg 51
          Met Arg Ser Leu Cys Cys Ala Pro Leu Leu Leu Leu Leu Leu
           1               5                  10

ctg ccg ccg ctg ctg ctc acg ccc cgc gct ggg gac gcc gcc gtg atc   99
Leu Pro Pro Leu Leu Leu Thr Pro Arg Ala Gly Asp Ala Ala Val Ile
 15                  20                  25                  30

acc ggg gct tgt gac aag gac tcc caa tgt ggt gga ggc atg tgc tgt   147
Thr Gly Ala Cys Asp Lys Asp Ser Gln Cys Gly Gly Gly Met Cys Cys
                35                  40                  45

gct gtc agt atc tgg gtc aag agc ata agg att tgc aca cct atg ggc   195
Ala Val Ser Ile Trp Val Lys Ser Ile Arg Ile Cys Thr Pro Met Gly
            50                  55                  60

aaa ctg gga gac agc tgc cat cca ctg act cgt aaa gtt cca ttt ttt   243
Lys Leu Gly Asp Ser Cys His Pro Leu Thr Arg Lys Val Pro Phe Phe
         65                  70                  75

ggg cgg agg atg cat cac act tgc cca tgt ctg cca ggc ttg gcc tgt   291
Gly Arg Arg Met His His Thr Cys Pro Cys Leu Pro Gly Leu Ala Cys
     80                  85                  90

tta cgg act tca ttt aac cga ttt att tgt tta gcc caa aag           333
Leu Arg Thr Ser Phe Asn Arg Phe Ile Cys Leu Ala Gln Lys
```

95 100 105

taatcgctct ggagtagaaa ccaaatgtga atagccacat cttacctgta aagtcttact 393
tgtgattgtg ccaaacaaaa aatgtgccag aaagaaatgc tcttgcttcc tcaactttcc 453
aagtaacatt tttatctttg atttgtaaat gatttttttt ttttttttta tcgaaagaga 513
attttacttt tggatagaaa tatgaagtgt aaggcattat ggaactggtt cttatttccc 573
tgtttgtgtt ttggtttgat ttggcttttt tcttaaatgt caaaaacgta cccattttca 633
caaaaatgag gaaaataaga atttgatatt ttgttagaaa aacttttttt ttttttctc 693
accaccccaa gccccatttg tgccctgccg cacaaataca cctacagctt ttggtccctt 753
gcctcttcca cctcaaagaa tttcaaggct cttaccttac tttatttttg tccatttctc 813
ttccctcctc ttgcatttta aagtggaggg tttgtctctt tgagtttgat ggcagaatca 873
ctgatgggaa tccagctttt tgctggcatt taaatagtga aaagagtgta tatgtgaact 933
tgacactcca aactcctgtc atggcacgga agctaggagt gctgctggac ccttcctaaa 993
cctgtcactc aagaggactt cagctctgct gttgggctgg tgtgtggaca gaaggaatgg 1053
aaagccaaat taatttagtc cagatttcta ggtttgggtt tttctaaaaa taaaagatta 1113
catttacttc ttttactttt tataaagttt tttttcctta gtctcctact tagagatatt 1173
ctagaaaatg tcacttgaag aggaagtatt tattttaatc tggcacaaca ctaattacca 1233
tttttaaagc ggtattaagt tgtaatttaa accttgtttg taactgaaag gtcgattgta 1293
atggattgcc gtttgtacct gtatcagtat tgctgtgtaa aaattctgta tcagaataat 1353
aacagtactg tatatcattt gatttatttt aatattatat ccttatttttt gtc 1406

<210> 5
<211> 108
<212> PRT
<213> Homo sapiens

R1

<400> 5
Met Arg Ser Leu Cys Cys Ala Pro Leu Leu Leu Leu Leu Leu Leu Pro
1 5 10 15
Pro Leu Leu Leu Thr Pro Arg Ala Gly Asp Ala Ala Val Ile Thr Gly
20 25 30
Ala Cys Asp Lys Asp Ser Gln Cys Gly Gly Gly Met Cys Cys Ala Val
35 40 45
Ser Ile Trp Val Lys Ser Ile Arg Ile Cys Thr Pro Met Gly Lys Leu
50 55 60
Gly Asp Ser Cys His Pro Leu Thr Arg Lys Val Pro Phe Phe Gly Arg
65 70 75 80
Arg Met His His Thr Cys Pro Cys Leu Pro Gly Leu Ala Cys Leu Arg
85 90 95
Thr Ser Phe Asn Arg Phe Ile Cys Leu Ala Gln Lys
100 105

<210> 6
<211> 81
<212> PRT
<213> Homo sapiens

<400> 6
Ala Val Ile Thr Gly Ala Cys Asp Lys Asp Ser Gln Cys Gly Gly Gly
1 5 10 15
Met Cys Cys Ala Val Ser Ile Trp Val Lys Ser Ile Arg Ile Cys Thr
20 25 30

Pro Met Gly Lys Leu Gly Asp Ser Cys His Pro Leu Thr Arg Lys Val
35 40 45
Pro Phe Phe Gly Arg Arg Met His His Thr Cys Pro Cys Leu Pro Gly
50 55 60
Leu Ala Cys Leu Arg Thr Ser Phe Asn Arg Phe Ile Cys Leu Ala Gln
65 70 75 80
Lys

<210> 7
<211> 21
<212> PRT
<213> Homo sapiens

<400> 7
Asn Asn Phe Gly Asn Gly Arg Gln Glu Arg Arg Lys Arg Lys Arg Ser
1 5 10 15
Lys Arg Lys Lys Glu
20

<210> 8
<211> 21
<212> PRT
<213> Homo sapiens

Q1

<400> 8
Ser His Val Ala Asn Gly Arg Gln Glu Arg Arg Arg Ala Lys Arg Arg
1 5 10 15
Lys Arg Lys Lys Glu
20

<210> 9
<211> 19
<212> PRT
<213> Homo sapiens

<400> 9
Met Arg Gly Ala Thr Arg Val Ser Ile Met Leu Leu Leu Val Thr Val
1 5 10 15
Ser Asp Cys

<210> 10
<211> 26
<212> PRT
<213> Homo sapiens

<400> 10
Met Arg Ser Leu Cys Cys Ala Pro Leu Leu Leu Leu Leu Leu Leu Pro

```
 1               5                  10                  15
Leu Leu Leu Thr Pro Pro Ala Gly Asp Ala
            20                  25
```

<210> 11
<211> 96
<212> PRT
<213> Bombina variegata

<400> 11

```
Met Lys Cys Phe Ala Gln Ile Val Val Leu Leu Leu Val Ile Ala Phe
 1               5                  10                  15
Ser His Gly Ala Val Ile Thr Gly Ala Cys Asp Lys Asp Val Gln Cys
            20                  25                  30
Gly Ser Gly Thr Cys Cys Ala Ala Ser Ala Trp Ser Arg Asn Ile Arg
        35                  40                  45
Phe Cys Ile Pro Leu Gly Asn Ser Gly Glu Asp Cys His Pro Ala Ser
    50                  55                  60
His Lys Val Pro Tyr Asp Gly Lys Arg Leu Ser Ser Leu Cys Pro Cys
65                  70                  75                  80
Lys Ser Gly Leu Thr Cys Ser Lys Ser Gly Glu Lys Phe Lys Cys Ser
                85                  90                  95
```

<210> 12
<211> 81
<212> PRT
<213> Dendroaspis polylepis polylepis

<400> 12

```
Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Leu Gln Cys Gly Lys Gly
 1               5                  10                  15
Thr Cys Cys Ala Val Ser Leu Trp Ile Lys Ser Val Arg Val Cys Thr
            20                  25                  30
Pro Val Gly Thr Ser Gly Glu Asp Cys His Pro Ala Ser His Lys Ile
        35                  40                  45
Pro Phe Ser Gly Gln Arg Lys Met His His Thr Cys Pro Cys Ala Pro
    50                  55                  60
Asn Leu Ala Cys Val Gln Thr Ser Pro Lys Lys Phe Lys Cys Leu Ser
65                  70                  75                  80
Lys
```

<210> 13
<211> 81
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic construct

<400> 13
Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys Gly Ala Gly
 1   5   10   15
Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg Met Cys Thr
            20   25   30
Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser His Lys Val
        35   40   45
Pro Phe Phe Gly Arg Arg Met His His Thr Cys Pro Cys Leu Pro Gly
    50   55   60
Leu Ala Cys Leu Arg Thr Ser Phe Asn Arg Phe Ile Cys Leu Ala Gln
65   70   75   80
Lys

<210> 14
<211> 86
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic construct

<400> 14
Ala Val Ile Thr Gly Ala Cys Asp Lys Asp Ser Gln Cys Gly Gly Gly
 1   5   10   15
Met Cys Cys Ala Val Ser Ile Trp Val Lys Ser Ile Arg Ile Cys Thr
            20   25   30
Pro Met Gly Lys Leu Gly Asp Ser Cys His Pro Leu Thr Arg Lys Val
        35   40   45
Pro Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys Leu Pro Asn
    50   55   60
Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys Ser Met Asp
65   70   75   80
Leu Lys Asn Ile Asn Phe
                85

<210> 15
<211> 89
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic construct

<400> 15
Gly Ile Leu Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys
 1   5   10   15
Gly Ala Gly Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg
            20   25   30
Met Cys Thr Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser
        35   40   45

```
His Lys Val Pro Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys
    50                  55                  60
Leu Pro Asn Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys
65                  70                  75                  80
Ser Met Asp Leu Lys Asn Ile Asn Phe
                85
```

<210> 16
<211> 85
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic construct

<400> 16

```
Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys Gly Ala Gly Thr
 1               5                  10                  15
Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg Met Cys Thr Pro
            20                  25                  30
Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser His Lys Val Pro
        35                  40                  45
Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys Leu Pro Asn Leu
    50                  55                  60
Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys Ser Met Asp Leu
65                  70                  75                  80
Lys Asn Ile Asn Phe
                85
```

Q4

<210> 17
<211> 86
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic construct

<400> 17

```
Ala Ala Ala Ala Ala Ala Cys Glu Arg Asp Val Gln Cys Gly Ala Gly
 1               5                  10                  15
Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg Met Cys Thr
            20                  25                  30
Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser His Lys Val
        35                  40                  45
Pro Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys Leu Pro Asn
    50                  55                  60
Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys Ser Met Asp
65                  70                  75                  80
Leu Lys Asn Ile Asn Phe
                85
```

<210> 18
<211> 87
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic construct

<400> 18
Met Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys Gly Ala
1 5 10 15
Gly Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg Met Cys
20 25 30
Thr Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser His Lys
35 40 45
Val Pro Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys Leu Pro
50 55 60
Asn Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys Ser Met
65 70 75 80
Asp Leu Lys Asn Ile Asn Phe
85

<210> 19
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic construct

<400> 19
Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys Gly
1 5 10

<210> 20
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide

<400> 20
Met Ala Val Ile Thr Gly Ala
1 5

<210> 21
<211> 6
<212> PRT

<213> Artificial Sequence

<220>
<223> synthetic peptide

<400> 21
Ala Val Ile Thr Gly Ala
1 5

<210> 22
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide

<400> 22
Val Ile Thr Gly Ala
1 5